

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

B. L. Downey Company, Inc.
Attn: Bernard Downey
2125 Gardner Road
Broadview, Illinois 60153

Application No.: 91070104
Applicant's Designation:
Subject: Coating Operation
Date Issued: July 12, 2006
Location: 2125 Gardner Road, Broadview

I.D. No.: 031030ACP
Date Received: March 11, 2002
Expiration Date: July 12, 2011

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of five plastisol dip coating lines with preheat and curing ovens; six epoxy powder coating lines with six curing ovens, five preheat dry-off ovens, and three wash stations, all controlled by four cyclones and four baghouses; two burn off ovens; one touch up spray paint area; five electrocoat coating lines with gas-fired curing ovens (ECO-1, 2, 3, 4, 5); three hot water boilers; and one gas-fired batch oven, pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued:
 - i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., volatile organic material to less than 100 tons per year, 10 tons/year for any individual Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
 - ii. To limit the potential emissions of VOM from the source to less than 25 tons/year. As a result, the source is excluded from the requirement of 35 Ill. Adm. Code Part 205, Emission Reduction Market System. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
2. The plastisol, electrocoating, and powder coating lines are subject to limitations of 35 IAC 218.204(j) for miscellaneous metal parts and products coating. The Permittee shall comply with either Condition 2(a) or 2(b) below:

Note: The coating lines are considered to apply a baked coating because the coating is cured or dried in an oven where the oven air temperature exceeds 90°C (194°F).

a. Compliant Coating Option

- i. The Permittee shall not apply at any time any coating in which the VOM content exceeds the following emission limitations. The following emission limitation is expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator:

A. For Extreme Performance Coating - Baked:

$\frac{\text{kg/l}}{0.40}$	$\frac{\text{lb/gal}}{3.3}$
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B. For All Other Coatings - Baked:

$\frac{\text{kg/l}}{0.34}$	$\frac{\text{lb/gal}}{2.8}$
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- ii. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composites.

b. Daily-Weighted Average Limitation Option

- i. For each coating line which applies multiple coatings, all of which are subject to the same numerical emission limitation within 35 IAC 218.204(j) during the same day (e.g., all coatings used on the line are subject to 0.40 kg/l [3.3 lbs/gal]), the daily weighted average VOM content shall not exceed the coating VOM content limit corresponding to the category of coating used [35 IAC 218.205(b)(1)].
- ii. Pursuant to 35 IAC 211.1670, daily-weighted average VOM content means the average VOM content of two or more coatings as applied on a coating line during any day, taking into account the fraction of total coating volume that each coating represents, as calculated with the following equation:

$$\text{VOM}_w = \left[\sum_{i=1}^n V_i C_i \right] / V_T$$

where:

- VOM_w = The average VOM content of two or more coatings as applied each day on a coating line in units of kg VOM/l (lbs VOM/gallon) of coating (minus water and any compounds which are specifically exempted from the definition of VOM),
- n = The number of different coatings as applied each day on a coating line,
- V_i = The volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on a coating line in units of 1 (gallon).
- C_i = The VOM content of each coating as applied each day on a coating line in units of kg VOM/l (lbs VOM/gallon) of coating (minus water and any compounds which are specifically exempted from the definition of VOM), and
- V_T = The total volume of all coatings (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on a coating line in units of 1 (gallon).

3. VOM emissions and operation of equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>VOM Usage</u>		<u>VOM Emissions</u>	
	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Coating Lines	0.9	8.1	0.9	8.1
5 Electrocoat Lines				
5 Plastisol Dip Lines				
Powder Coat				
Touch-Up				
Clean-Up Solvents	1.5	15.0	1.5	15.0
			Total:	23.1

These limits are based on maximum coating material usage and maximum VOM content. Emissions were determined based on material balance. Compliance with annual limits shall be determined from a rolling total of 12 months of data.

- 4a. Emissions and operation of all natural gas combustion equipment shall not exceed the following limits:

<u>Fuel Usage</u>		<u>Pollutant</u>	<u>Emissions</u>	
<u>(mmscf/Mo)</u>	<u>(mmscf/Yr)</u>		<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
54	535	NO _x	2.7	26.8
		CO	2.3	22.5

Fuel Usage		Pollutant	Emissions	
(mmscf/Mo)	(mmscf/Yr)		(Tons/Mo)	(Tons/Yr)
		PM/PM ₁₀	0.2	2.1
		VOM	0.2	1.5
		SO ₂	0.1	0.2

These limits are based on standard AP-42 emission factors for natural gas combustion, maximum firing rates, maximum hours of operation, and a conversion factor of 1,000 Btu/scf. Compliance with annual limits shall be determined from a rolling total of 12 months of data.

- b. Natural gas shall be the only fuel fired in the fuel combustion equipment at this facility.
- 5a. The two burn-off ovens shall be operated according to the following criteria.
 - i. Material insulated with polyvinyl chloride or asbestos, or scrap containing the fuming metals tin, zinc, or lead shall not be charged to this oven.
 - ii. The afterburner shall be heated to an operating temperature of 1400°F before charging and this temperature shall be maintained during operation.
 - iii. The oven shall be equipped with an afterburner temperature indicator.
- b. This permit is issued based on negligible emissions of particulate matter from the two burn-off ovens. For this purpose emissions from each emission unit shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
- 6. This permit is issued based on negligible emissions of particulate matter from the powder coat line. For this purpose, emissions shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 tons/year.
- 7. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
- 8a. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source

category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.

- b. The Permittee shall maintain records of the following items, and such other items as may be appropriate to allow the Illinois EPA to review compliance with the limits in this permit.
 - i. When the Permittee is using the compliant coating option, the following information shall be collected and recorded each day for each coating line and the information shall be maintained at the source for a period of three years, pursuant to 35 IAC 218.211(c)(2):
 - A. The name and identification number of each coating as applied on each coating line;
 - B. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line;
 - ii. When the Permittee is using the daily-weighted average limitation option, the following information shall be collected and recorded each day for each coating line and the information shall be maintained at the source for a period of three years, pursuant to 35 IAC 218.211(d)(2):
 - A. The name and identification number of each coating as applied on each coating line.

- B. The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.
- C. The daily weighted average VOM content of all coatings as applied on each coating line as defined in 35 IAC 218.104 (See also Condition 2(b)(ii)).
- iii. The amount of coating material and cleaning solvent (if any) used (gallons/month and gallons/year).
- iv. Natural gas usage (scf/month and scf/year).
- v. Daily records for operation of the afterburner:
 - A. Afterburner combustion chamber monitoring data.
 - B. A log of operating time for the capture system, afterburner, monitoring device, and the associated emission unit.
 - C. A maintenance log for the capture system, afterburner, and monitoring device detailing all routine and non-routine maintenance performed including dates and duration of any outages.
- vi. NO_x, CO, VOM, PM, and SO₂ emissions with supporting calculations and documentation (tons/month and tons/year).
- c. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
- 9. The Permittee shall notify the Agency in the following instances:
 - a. Any record showing violation of 35 IAC 218.204 or 218.205 shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.
 - b. At least 30 calendar days before changing the method of compliance from 35 IAC 218.205 to 35 IAC 218.204 or 35 IAC 218.207, the Permittee shall comply with all requirements of 35 IAC 218.211(c)(1) or (e)(1), respectively. Upon changing the method of compliance with this subpart from 35 IAC 218.205 to 35 IAC 218.204 or 35 IAC 218.207, the Permittee shall comply with all requirements of 35 IAC 218.211(c) or (e), respectively.

- c. At least 30 calendar days before changing the method of compliance from 35 IAC 218.204 to 35 IAC 218.205 or 35 IAC 218.207, the Permittee shall comply with all requirements of 35 IAC 218.211(d)(1) or (e)(1), respectively. Upon changing the method of compliance from 35 IAC 218.204 to 35 IAC 218.205 or 35 IAC 218.207, the Permittee shall comply with all requirements of 35 IAC 218.211(d) or (e), respectively.
- 10. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
- 11. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
9511 West Harrison
Des Plaines, Illinois 60016

If you have any questions on this, please call Jason Schnepf at 217/782-2113.

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:JMS:psj

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the facility operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels, e.g., 100 tons per year of VOM at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled.

Emission Unit	Emissions (Tons/Year)						Single HAP	Total HAP
	NO _x	CO	VOM	PM	SO ₂			
Coating Lines 5 Electrocoat Lines 5 Plastisol Dip Lines Powder Coat Touch-up			8.1	0.5				
Clean-up Solvents			15.0					
Fuel Comb. Equipment	26.8	22.5	1.5	2.1	0.2			
Burn-off Ovens				0.9				
Totals:	26.8	22.5	24.6	3.5	0.2	< 10	< 25	

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